

and unsportsmanlike weapon, the "punt-gun": on one occasion, he remarks, no less than 285 Dunlin and 5 Wigeon fell to one shot! And this in the name of Sport!!

The illustrations, which are numerous, are drawn by the author himself, and are really the most admirable and spirited pen-and-ink sketches which we have seen for a long time. In a word, this is a book to read and a book to keep.

W. P. PYCRAFT.

PROCEEDINGS OF LEARNED SOCIETIES.

GEOLOGICAL SOCIETY.

June 19th, 1907.—Aubrey Strahan, Sc.D., F.R.S., Vice-President, in the Chair.

The following communications were read:—

1. 'The Inferior Oolite and Contiguous Deposits of the Bath-Douling District.' By Linsdall Richardson, F.G.S.

In this paper a detailed description is given of the Inferior Oolite of the country between Douling and Bath. The beds have been studied at different localities within the area by several geologists, but in most cases only the actual facts observable were recorded—there was little or no attempt at correlation. Now it is shown that there is within the area no Inferior-Oolite deposit of earlier date than the Upper *Trigonia*-Grit—a deposit of *Garantiana* hemera. In the hills south of the Avon Valley at Bath, and as far south as a line drawn east and west through Carnicote, near Timsbury, this deposit rests upon the Midford Sands. South of this line, and between it and one similarly orientated about half-a-mile farther south, it rests upon the local Cephalopod-Bed: here of greater antiquity than the 'Sands' (Midford); not younger, as in the case of the Cotteswold Cephalopod-Bed. South of the latter line, the Upper *Trigonia*-Grit, often conglomeratic, rests upon the non-arenaceous Liassic deposits, until in the more immediate neighbourhood of the Mendip Hills it is overstepped by the Douling Stone, which rests directly upon the well-planed, bored, and oyster-strewn surface of the Rhaetic White Lias and the Carboniferous Limestone. On the south side of the Mendip Hills the Upper *Trigonia*-Grit comes in again.

The Fullers' Earth at Midford, at least the lower part, is of *zigzag* hemera. The intervening Inferior Oolite between it and the Upper *Trigonia*-Grit may be thus divided, dated, and compared:—

Fullers' Earth.....			(zigzag).	
Inferior	Doulting Beds.	{ I. Rubbly Beds. II. <i>Anabacia</i> -Limestones. III. Doulting Stone.	(inter-zigzag - <i>Truellii</i> .)	} <i>Clypeus</i> -Grit of the Mid and North Cotteswolds.
Oolite.				
(Non-Sequence) Lias.		VI. Upper <i>Trigonia</i> -Grit (<i>Garantiana</i>).		

In one appendix Mr. S. S. Buckman indicates the deposits in Dorset equivalent to the above; in another the late Mr. J. F. Walker and Mr. Richardson deal with the Brachiopoda of the Fullers' Earth, naming seven new species; and in a third, Mr. Richardson describes a new *Amberleya* and *Spiroorbis*. The micro-fauna of the Upper Coral-Bed is dealt with by Mr. C. Upton, who obtained from material furnished him from Midford and Timsbury Sleight most of the micro-brachiopoda such as were found by Charles Moore at Dundry Hill.

2. 'The Inferior Oolite and Contiguous Deposits of the District between the Rissingtons and Burford.' By Linsdall Richardson, F.G.S.

This paper is presented with the preceding, because there are several points of similarity between the two districts described. Both are near lines of country along which movements of upheaval were frequent during the time of formation of the Inferior-Oolite rocks.

In the Bath-Doulting district, above the Upper *Trigonia*-Grit (which rests upon the Upper Lias) over a restricted area is the Dundry Freestone, and over a greater the Upper Coral-Bed. Then come the Doulting Beds. The Doulting Beds are equivalent to the *Clypeus*-Grit of the district here dealt with: the Rubbly Beds to the Rubbly Beds, and the *Anabacia*-Limestones, plus the Doulting Stone, to the 'Massive Beds' of the *Clypeus*-Grit. The basal portion of the Fullers' Earth in the neighbourhood of Midford is of zigzag hemera. There is no reason for assigning the thin clay-bed, with its median band of *Ostrea-acuminata* Limestone at Great Rissington, to any other hemera. Whatever is the case elsewhere, there is no deposit in the Rissington district between the *Clypeus*-Grit and the Fullers' Earth.

3. 'The Flora of the Inferior Oolite of Brora (Sutherland).' By Miss M. C. Stopes, D.Sc., Ph.D., Lecturer in the Victoria University of Manchester.

This paper is to place on record the discovery of a bed containing impressions of plants, which represent a flora bearing a strong likeness to that of the Inferior Oolite of the Yorkshire coast. Previously,

but one species and a second doubtful one were known from these coal-bearing beds. The bed in which the plants were found was a thin shale-band cropping out below high-tide level on the coast, about $1\frac{1}{4}$ miles south of Brora. According to Prof. Judd's mapping, this reef would come within the boundary of the Lower Oolite, although from the more recent Geological-Survey map it appears to come in the position of the Middle Oolite. It forms a band 2 or 3 inches thick in a barren grey shale, and the impressions are fragmentary except in the case of *Ginkgo*, some of the leaves of which are practically perfect and show the veining of the lamina, and in some cases (after suitable treatment) the minute detail of the epidermis. Seven species of plants are identified, one of them being new, and four other species admitting of generic identification; and most of these species are identical with those obtained from the Inferior Oolite of Yorkshire. The minute structure of the leaves of *Ginkgo* is compared with those of *G. biloba*, and proves the species to be quite distinct. The plants found are those of a land-area, probably with firm ground surrounding pools or shallow water, as indicated by the fact that *Ginkgo* and *Equisetites* are the two commonest forms.

MISCELLANEOUS.

Altum's Squirrel Names. By GERRIT S. MILLER.

DR. ERNST HARTERT has called my attention to some overlooked names for squirrels proposed more than thirty years ago by Altum, in the second edition of the 'Forstzoologie.' The technical account of *Sciurus vulgaris* occupies pages 73-75 of the volume on mammals, and, as the typical red German form is considered too well-known to need special description, is chiefly concerned with a detailed account of the peculiar varieties or special colour-phases of the species. Three of these phases occur in Central Germany together with the red form, while three others are considered as definite geographical subspecies. All are technically named in a short table on page 75:—

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| (a) | [<i>Sciurus vulgaris</i>], | var. <i>fuscoatra</i> , tief castanienbraun [Harz, Schlesien]. |
| (b) | [„] | „ <i>nigrescens</i> , die schwärzlichen in Fichtenrevieren [Schlesien]. |
| (c) | [„] | „ <i>brunnea</i> , erdig graubraun ("græca, alpina") [Elsass-Lothringen]. |
| (d) | [„] | „ <i>quadricolor</i> , die ibenhorster Form [Ibenhorst, Ostpreussen]. |
| (e) | [„] | „ <i>cinerea</i> , die westsibirischen, hellgrau mit röthlicher Rückenmitte [Kasan]. |
| (f) | [„] | „ <i>atrocinerea</i> , die tiefgrauen ostsibirischen [äussersten Osten]. |